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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/693,502

10/27/2003

Tomio Kurosu

061069-0306520

3154

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7590

06/29/2004

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EXAMINER

GRAY, DAVID M

ART UNIT

PAPER NUMBER

2851

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/693,502

Applicant(s)

KUROSU ET AL.

Examiner

David M Gray

Art Unit

2851

*Am*

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-13, 16 and 17 is/are rejected.
- 7) ☒ Claim(s) 14 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 10/114,240.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by SanGregory.

Regarding claim 11, SanGregory discloses “a base plate [88 of 5,173,728, see col 3, lns 30-42], a blade [shutter blade, col 3, ln 41], and an actuator [electromagnetic actuator, col 3, ln 38] in which a rotor [10] is made to turn about a turning axis within a range of a preset angle in a direction determined by a direction of a current supplied to a stator coil; wherein said rotor of said actuator includes a column-shaped permanent magnet [20] having surfaces perpendicular to the turning axis [top and bottom of 20 as shown in figure 1] and a surface parallel with the turning axis [sides of 20 as shown in figure 1] and a frame body [14] configured integrally with said permanent magnet [col 4, ln 22, SanGregory states friction may be used to hold magnet 20 in position, such frictional engagement meets the claimed “configured integrally”], wherein said frame body covers both ends of a turning axial region of said permanent magnet and continuously covers said surfaces perpendicular to the turning axis and said surface parallel with said turning axis of said permanent magnet [26 of 18 continuously surrounds 20] in such a pattern that a plurality of exposed faces of said permanent magnet are provided [face 30 and a portion of the faces surrounding face 30], and wherein said frame body is provided with a journal [18] that is formed at each of portions covering the both ends of the turning axial region and that

Art Unit: 2851

is supported by a bearing of said stator [87 and 90 of 5,173,728}, and an output portion [16] that is formed to be a portion extending in a radial direction from one of the ends of the turning axial region.

Regarding claim 16, SanGregory discloses “a shutter device for cameras [col 3, ln 38].”

Claims 11-13, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Naganuma.

Regarding claim 11, Naganuma discloses “a base plate [310], a blade [30], and an actuator [figure 9] in which a rotor [20, 36] is made to turn about a turning axis within a range of a preset angle [col 4, lns 47-55] in a direction determined by a direction of a current supplied to a stator coil [42]; wherein said rotor of said actuator includes a column-shaped permanent magnet [20] having surfaces perpendicular to the turning axis [top and bottom of 20 as shown in figure 10] and a surface parallel with the turning axis [side, including 21, as shown in figure 10] and a frame body [36 including the portion having 37b] configured integrally with said permanent magnet [as shown in figures 9 and 11], wherein said frame body covers both ends of a turning axial region of said permanent magnet and continuously covers said surfaces perpendicular to the turning axis and said surface parallel with said turning axis of said permanent magnet [see figures 9 and 11, 36 including the portion having 37b surrounds 20] in such a pattern that a plurality of exposed faces of said permanent magnet are provided [faces between 21's], and wherein said frame body is provided with a journal [37a, 37b] that is formed at each of portions covering the both ends of the turning axial region and that is supported by a bearing [41, 51] of said stator [40, 50}, and an output portion [portion between 36 and 33 in figure 9, 37, 37a in

figure 11] that is formed to be a portion extending in a radial direction from one of the ends of the turning axial region.

Regarding claim 12, Naganuma discloses “one of said permanent magnet and said frame body is provided with a polygonal concavity and another of said permanent magnet and said frame body is provided with a convexity projecting to be fitted to said concavity [37a and 37b fit into the recess in permanent magnet 20].

Regarding claim 13, Naganuma discloses “at a place where said surface parallel with the turning axis of said permanent magnet faces said frame body covering said surface parallel with the turning axis, one of said permanent magnet and said frame body is provided with concavities and another of said permanent magnet and said frame body is provided with convexities projecting to be fitted in said concavities [36 fits into flat 21].”

Regarding claim 16, Naganuma discloses “a shutter device for cameras [figure 11].”

Regarding claim 16, Naganuma discloses “a stop device for cameras [figure 10].”

#### ***Allowable Subject Matter***

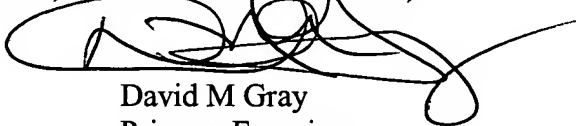
Claims 14 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art does not disclose or suggest "surfaces perpendicular to the turning axis has a groove configured along a boundary between said two magnetic poles, a part of said frame body is formed in the groove" in combination with the remaining claim elements as set forth in claims 14 and 15.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M Gray whose telephone number is 571-272-2119. The examiner can normally be reached on M-T 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'DM Gray', with a large, stylized flourish extending to the right.

David M Gray  
Primary Examiner  
Art Unit 2851